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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------|------------------|
| 10/621,704  | 07/17/2003  | Percy Greenberg      | 55404/118/101          | 1521             |
| 5909  | 7590        | 09/30/2004           | EXAMINER               |                  |
| NAWRICKI, ROONEY & SIVERTSON<br>SUITE 401, BROADWAY PLACE EAST<br>3433 BROADWAY STREET NORTHEAST<br>MINNEAPOLIS, MN 554133009 |             |                      | PARKER, FREDERICK JOHN |                  |
|   |             | ART UNIT             | PAPER NUMBER           |                  |
|   |             | 1762                 |                        |                  |

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/621,704             | GREENBERG, PERCY    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Frederick J. Parker    | 1762                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) 16-18 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 7 is vague and indefinite because a spray spattering step cannot comprise or be a printing step, since printing and spattering (a type of spraying) are distinct and mutually exclusive coating processes. For Examination, any spatter spray method of applying patina-like colorant will be considered to meet this unclear limitation.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-5,7-9,11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priggemeyer et al US 6176905 in view of Toshihiro JP2002-180264.

Priggemeyer et al teaches a method of forming a patina on copper-based metal surfaces by applying a solution of copper salts and salts of inorganic acids which provide the patina coloration, followed by drying and application of a water-permeable protective coating to allow continued interaction of the atmosphere with the underlying patina (“natural patination”). See col. 2, 11-29; col. 4, 11-29. Application of the solution which results in the green patina coloration is by brush, roller, or spraying device (abstract). While the reference is not limited to any pattern, it does not expressly teach a non-uniform colorant layer of “inter-dispersed spots”.

Toshihiro teaches a similar method of applying coloration reactants to copper-bearing substrates, the reactants being an aqueous acid solution of copper carbonate and/or chloride which reacts to form a spot pattern of patina (abstract). The patterns are applied by spraying which forms a non-uniform spot pattern as shown in figure 1 [0010], which is clearly a sprayed non-uniform “spatter pattern” per claims 2-3,7,11-12. However, a pattern may also be mechanically wiped using, for example, a paper towel, to achieve sparser, elongated patterns such as in figure 2 [0014], per claim 4-5,8.

As to claims 13-15, movement and variation of colorant density or volume of colorant applied are variations of the known process within the purview of the skilled artisan to produce variations of the decorative effects of the patinated surface, and as such do not impart patentability. Matters related to the choice of ornamentation producing no mechanical effect or

advantage considered to constitute the invention are considered obvious and do not impart patentability, In re Seid 73 USPQ 431.

As to product by process claim 9, since the combination of references produces the same or essentially the same non-continuous patina layer of inter-dispersed spots as would have been achieved by the combination of references, the product would have been obvious because there is no patentable difference given the structure of the article as claimed. A product by process claim is not limited to the recited process steps, but rather the structure of the product, MPEP 2113.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Priggemeyer et al by incorporating the teachings of Toshihiro to form non-uniform patina spot patterns by spraying to provide copper-bearing surfaces with a variety of aesthetically pleasing non-uniform patinated surfaces.

4. Claims 6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priggemeyer et al US 6176905 in view of Toshihiro JP2002-180264 and further in view of Hoffman et al US 2113449.

Priggemeyer et al and Toshihiro are cited for the same reasons previously discussed, which are incorporated herein. Applying paint as the colorant is not taught. However, Hoffman et al teaches to apply by spraying a pigment- or dye-based paint to surfaces in a manner that paint is dispersed as small droplets to create an uneven/ scanty non-uniform finish having a multi-toned effect, without limitation as to pigments and dyes used. Since the reference is directed toward a multi-toned metallic effect, the reference would have reasonably suggested to use a paint (paint

comprises a pigment/dye and resin vehicle) in place of the reactant colorants of Priggmeyer et al because of the expectation of producing the appearance of a patinated non-uniform finish.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Priggmeyer et al in view of Toshihiro by substituting the sprayed pigment/dye-based paint as disclosed by Hoffman et al for the reactant colorants of Priggmeyer et al because of the expectation of achieving the appearance of a similar non-continuous patina layer of inter-dispersed spots.

5. Claims 16-18 distinguish over the prior art which does not teach nor suggest to print/screen print colorant onto a copper substrate to form a non-continuous layer of inter-dispersed spots to provide the appearance of patination. The claims are objected to for depending from a rejected base claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571/272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frederick J. Parker  
Primary Examiner  
Art Unit 1762

fjp